

 **Sterne Kessler  
Goldstein Fox**  
ATTORNEYS AT LAW



Robert Greene Sterne  
Edward J. Kessler  
Jorge A. Goldstein  
David K.S. Cornwell  
Robert W. Esmond  
Tracy-Gene G. Durkin  
Michele A. Cimbala  
Michael B. Ray  
Robert E. Sokohl  
Eric K. Steffe  
Michael Q. Lee  
Steven R. Ludwig  
John M. Covert  
Linda E. Alcorn  
Robert C. Millonig  
Lawrence B. Bugaisky  
Donald J. Featherstone  
Michael V. Messinger

Judith U. Kim  
Timothy J. Shea, Jr.  
Patrick E. Garrett  
Heidi L. Kraus  
Edward W. Yee  
Albert L. Ferro\*  
Donald R. Banowitz  
Peter A. Jackman  
Teresa U. Medler  
Jeffrey S. Weaver  
Kendrick P. Patterson  
Vincent L. Capuano  
Eldora Ellison Floyd  
Thomas C. Fiala  
Brian J. Del Buono  
Virgil Lee Beaston  
Kimberly N. Reddick  
Theodore A. Wood

Elizabeth J. Haanes  
Joseph S. Ostroff  
Frank R. Cottingham  
Christine M. Lhuillier  
Rae Lynn Prengaman  
Jane Shershenovich\*  
Lawrence J. Carroll\*  
George S. Bardmesser  
Daniel A. Klein\*  
Jason D. Eisenberg  
Michael D. Specht  
Andrea J. Kamage  
Tracy L. Muller\*  
LuAnne M. DeSantis  
John J. Figueroa  
Ann E. Summerfield  
Tiera S. Coston\*  
Eric W. Ledford\*

Michael D. Specht  
Jessica L. Parezo  
Timothy A. Doyle\*  
Cynthia M. Bouchez  
Nicole D. Dretar\*  
Ted J. Ebersole  
  
**Registered Patent Agents\***  
Karen R. Markowicz  
Nancy J. Leith  
Helene C. Carlson  
Gaby L. Longworth  
Matthew J. Dowd  
Aaron L. Schwartz  
Mary B. Tung  
Katrina Y. Pei Quach  
Bryan L. Skelton  
Robert A. Schwartzman

Teresa A. Colella  
Jeffrey S. Lundgren  
Victoria S. Rutherford  
Eric D. Hayes  
Michelle K. Holoubek  
Robert H. DeSelms  
Simon J. Elliott  
Julie A. Heider  
Mita Mukerjee  
Scott M. Woodhouse  
  
**Of Counsel**  
Kenneth C. Bass III  
Evan R. Smith  
Marvin C. Guthrie  
  
\*Admitted only in Maryland  
\*Admitted only in Virginia  
\*Practice Limited to Federal Agencies

February 4, 2004

**WRITER'S DIRECT NUMBER:**  
(202) 772-8675  
**INTERNET ADDRESS:**  
JHELVEY@SKGF.COM

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**Art Unit 2685**

Re: U.S. Utility Patent Application  
Appl. No. 09/665,581; Filed: September 18, 2000  
For: **Direct Conversion Tuner**  
Inventor: Erlend Olson  
Our Ref: 1875.0160000

**RECEIVED**

FEB 09 2004

Technology Center 2600

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Fee Transmittal (Form PTO/SB/17);
2. Fourth Supplemental Information Disclosure Statement;
3. Form PTO-1449 with (5) accompanying documents;
4. Return postcard; and
5. PTO-2038 Credit Card Payment Form for \$180.00 to cover:  
\$180.00 for IDS Late Filing Surcharge.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents  
February 4, 2004  
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey T. Helvey  
Agent for Applicant  
Registration No. 44,757

JTH/agj  
DC1\226073.1

OIPF J226  
FEB 04 2004  
PATENT & TRADEMARK OFFICE

2685

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)  
180.00

## Complete if Known

Application Number	09/665,581
Filing Date	September 18, 2000
First Named Inventor	Erlend Olson
Examiner Name	Nguyen, Duc M.
Art Unit	2685
Attorney Docket No.	1875.0160000

RECEIVED

FEB 09 2004

Technology Center 2600

## METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☒ Other\*\* ☐ None

\*\*Charge any deficiencies or credit any overpayments in Deposit Account: the fees to Deposit Acct. No. 19-0036

Deposit Account Number: 19-0036  
Deposit Account Name: Sterne Kessler, Goldstein & Fox P.L.L.C.

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments

☐ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity | Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	\$180.00
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

RECEIVED  
FEB 09 2004

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 0.00

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	62 - 62 ** = 0	\$18.00	\$0.00
Multiple Dependent	8 - 8 ** = 0	\$86.00	\$0.00
		\$290.00	\$0.00

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1202 18	2202 9	Claims in excess of 20	
1201 86	2201 43	Independent claims in excess of 3	
1203 290	2203 145	Multiple dependent claim, if not paid	
1204 86	2204 43	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)			(\$) 0.00

\*\*or number previously paid, if greater; For Reissues, see above

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)  
180.00

## SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Jeffrey T. Helvey	Registration No. (Attorney/Agent)	44,757	Telephone	(202) 371-2600
Signature	<i>Jeffrey T. Helvey</i>	Date	2/4/04		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Erlend Olson

Appl. No.: 09/665,581

Filed: September 18, 2000

For: **Direct Conversion Tuner**

Confirmation No.: 4718

Art Unit: 2685

Examiner: Nguyen, Duc M.

Atty. Docket: 1875.0160000

10/02/05  
2/17/04  
OK

**Fourth Supplemental Information Disclosure Statement**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**RECEIVED**

FEB 09 2004

Technology Center 2600

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this Fourth Supplemental Information Disclosure Statement is a continuation of the numbering in Applicant's Third Supplemental Information Disclosure Statement filed on January 22, 2004 in connection with the above-captioned application.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicant has listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicant has checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☐ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA), OR within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, OR before the mailing date of a first Office Action on the merits OR before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.

☒ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.

☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

☒ c. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$180.00 in payment of the fee under 37 C.F.R. § 1.17(p).

☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee.

Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$\_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:

- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
- ☐ 6. A concise explanation of the relevance of the non-English language document(s) appears below:
- ☐ 7. Copies of the documents are submitted herewith.

- ☐ 8. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. \_\_\_\_\_, filed \_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO 1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey T. Helvey  
Agent for Applicant  
Registration No. 44,757

Date: 2/4/04

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600

JTH/agj  
DCI\226084.1